

I claim:

1. A method for detecting channels of a channel to which hard disk controllers belong, said method detecting the corresponding relations between a plurality of channels of a host and a plurality of enclosure-controllers connected with hard disks, said method comprising the steps of:
 - A. said host sending an idle command to all of said hard disks to let them idle;
 - B. said host performing read/write actions to said hard disk connected to channel 1 to let said hard disk generate a current variation;
 - 10 C. transforming the current variation into a voltage signal sent to said enclosure-controller, which compares variation of the voltage signal when said hard disk idles and operates to obtain a flag;
 - D. said host reading said flag in said enclosure-controllers and building the corresponding relation between said channel 1 and one of said enclosure-controllers according to said flag; and
 - 15 E. said host performing read/write actions to said hard disk connected to channel 2, repeating said Steps C and D until the corresponding relations between all of said channels of said host and said enclosure-controllers are built.
- 20 2. The method as claimed in claim 1, wherein said host is series connected to said enclosure-controllers via a serial bus and said channels of said host and said hard disks are connected at random before said Step A.
3. The method as claimed in claim 1, wherein each of said enclosure-controllers has an ID, and said host makes use of software to read said flags in said enclosure-controllers via a bus and then build the corresponding relation
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between said channel 1 and said ID of one of said enclosure controllers according to said flag in said Step D.

4. The method as claimed in claim 1, wherein a current sensor connected to each of said enclosure-controllers is used to detect the current variation and
- 5 transform the current variation into said voltage signal in said Step C.